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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,128	06/22/2001	Morris E. Jones, JR.	CT-P9191-D	9026

7590 06/04/2003  
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EXAMINER

HARRISON, CHANTE E

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/888,128

Applicant(s)

JONES,, MORRIS E.

Examiner

Chante Harrison

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-19 and 21-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-19 and 21-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "26" and "32" have both been used to designate the character generator; reference characters "16" and "42" have both been used to designate the video controller; reference characters "24" and "38" have both been used to designate the monitor; reference characters "20" and "40" have both been used to designate video RAM; reference characters "34" and "52" have both been used to designate the shift register. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "character number" as claimed in claim 11 and "setting the cell line bit length to said whole number multiple" as claimed in dependent claim 15.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 14 recites the limitation "the first and last bits" in line 7 of the claim. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 15 recites the limitation "the cell line bit length" in line 5. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 9, 10, 13, 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Kotha et al., U.S. Patent 5,521,614, 5/1996.

As per independent claims 9 and 21, Kotha discloses receiving a data element representing a row of a text character cell (col. 5, ll. 5-10); forming a horizontal expansion pattern corresponding to said text character, said pattern set to a specified length (col. 5, ll. 50-55); appending said horizontal expansion pattern to the second sequence of data elements (Fig. 2; col. 5, ll. 56-64); and determining whether another data element should be read (col. 7, ll. 17-25).

As per dependent claims 10 and 22, Kotha discloses the specified length is the same for all horizontal expansion patterns comprising said second sequence of data elements (col. 6, l. 40-46); and said second sequence of data elements fills a flat panel display (abstract; col. 4, ll. 49-51).

As per dependent claim 13, Kotha discloses the data element comprises eight bits (col. 5, ll. 42-45); and said horizontal expansion pattern comprises ten bits (col. 5, ll. 60-64).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11, 14-16, 23 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotha et al., U.S. Patent 5,521,614, and further in view of Chandavarker et al., U.S. Patent 5,940,085, 8/1999.

As per independent claims 14 and 26, Kotha discloses receiving a plurality of bits representing a plurality of text character cell lines (col. 5, ll. 5-10); determining the first and last bits for each data element within said first sequence (col. 5, ll. 56-59); forming a horizontal expansion pattern corresponding to said text character, said pattern set to a specified length (col. 5, ll. 50-55); appending said horizontal expansion pattern to the second sequence of data elements (Fig. 2; col. 5, ll. 56-64); and determining whether another data element should be read (col. 7, ll. 17-25). Kotha discloses determining the character cell data based on the horizontal frequency

(col. 7, ll. 15-23), but fails to disclose determining the cell row number.

Chandavarker teaches determining the cell row number (col. 4, ll. 55-67) as he discloses a VGA having memory that passes address information containing cell line data. It would have been obvious to one of skill in the art at the time of invention to include Chandavarker's teaching of determining the character cell row number in the disclosure of Kotha because Kotha teaches a VGA controller accessing memory to obtain character data that is serially input into expansion hardware (col. 5, ll. 1-15; col. 7, ll. 10-25).

As per dependent claims 15 and 27, Kotha in view of Chandavarker discloses scanning said plurality of bits for repeating bit values at whole number multiples of eight or nine (col. 7, ll. 25-39; col. 5, ll. 44-45), said bit values corresponding to the background color (abstract; col. 7, ll. 21-25); setting the cell line bit length to said whole number multiple (col. 7, ll. 40-43; col. 5, ll. 44-45). Kotha fails to specifically disclose setting the first bit of a data element to the bit following said repeating bit value; and setting the last bit of a data element based on said first bit and said cell line bit length. It would have been obvious to one of skill in the art at the time of invention to include setting the first bit of a data element to the bit following said repeating bit value; and setting the last bit of a data element based on said first bit and said cell line bit length in the disclosure of Kotha because Kotha teaches triggering a repeat signal using the far right bit of the character and maintaining the signal value for the horizontal length of the character which is determined as a result of the number of duplicated pixels (col. 7, ll. 20-45).

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As per dependent claims 11, 16, 23 and 28, Kotha discloses a horizontal expansion pattern (col. 5, ll. 50-55) but fails to disclose the pattern contained in a lookup table indexed by character number and row number, which Chandavarker teaches (col. 4, ll. 56-65). Chandavarker teaches a VGA having memory access for providing character output data requiring two pieces of address information, one of which includes the cell line number and the character information that form an address that is used to access data to replicate a cell line (col. 4-5, ll. 50-5). It would have been obvious to one of skill in the art to include Chandavarker's teaching of an expansion pattern contained in a lookup table indexed by character number and row number with the disclosure of Kotha because Kotha teaches accessing character expansion data via a VGA controller that accesses video memory storing addressable image data including character bit data (col. 5, ll. 1-15; col. 7, ll. 10-40).

As per dependent claim 18, Kotha discloses determining whether a horizontal scan has completed (col. 7, ll. 15-25, 40-45); loading horizontal expansion information for the next row when a horizontal scan has completed (col. 7, ll. 15-22). Kotha fails to disclose loading into VGA RAM a lookup table containing the information, which Chandavarker discloses (Fig. 4; col. 4-5, ll. 45-5). It would have been obvious to one of skill in the art at the time of invention to include Chandavarker's disclosure of loading into VGA RAM a lookup table containing pattern information because Kotha teaches accessing character expansion data via a VGA controller that accesses video memory storing addressable image data including character bit data (col. 5, ll. 1-15; col. 7, ll. 10-40).



5. Claims 12 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotha et al. as applied to claims 9 and 21 above and further in view of Bril et al., U.S. Patent 5,539,428, 7/1996.

As per dependent claims 12 and 24, Kotha fails to disclose the lookup table resides in layer 3 of VGA video RAM, which Bril discloses (Fig. 2; col. 5, ll. 15-25; col. 6, ll. 60-65). Bril teaches a VGA controller having a video memory comprising multiple planes of which the third layer is used for storing font data. It would have been obvious to one of skill in the art at the time of invention to include Bril's disclosure of a lookup table resides in layer 3 of VGA video RAM in the disclosure of Kotha because Kotha teaches a VGA controller accessing stored character data from video memory storing addressable image data including character bit data (col. 5, ll. 1-15).

As per dependent claim 25, Kotha in view of Bril discloses the data element comprises eight bits (col. 5, ll. 42-45); and said horizontal expansion pattern comprises ten bits (col. 5, ll. 60-64).

6. Claims 17, 19 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotha and Chandavarker et al. as applied to claims 14 and 26 above and further in view of Bril et al., U.S. Patent 5,539,428, 7/1996.

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As per dependent claims 17, 19 and 29, Kotha and Chandavarker fail to disclose the lookup table resides in layer 3 of VGA video RAM, which Bril discloses (Fig. 2; col. 5, ll. 15-25; col. 6, ll. 60-65). Bril teaches a VGA controller having a video memory comprising multiple planes of which the third layer is used for storing font data. It would have been obvious to one of skill in the art at the time of invention to include Bril's disclosure of a lookup table resides in layer 3 of VGA video RAM in the disclosure of both Kotha and Chandavarker because Kotha teaches a VGA controller accessing stored character data from video memory storing addressable image data including character bit data (col. 5, ll. 1-15) as does Chandavarker (col. 4, ll. 30-67).

***Conclusion***

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Chante Harrison whose telephone number is (703) 305-3937.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (703) 305-4713.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

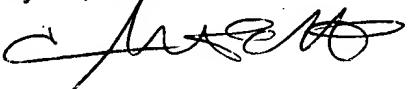
(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ch

May 30, 2003

A handwritten signature in black ink, appearing to be 'Chante Harrison', written over the date.